

Attorney Docket No.

030681-531

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Hae-kyoung Kim

Group Art Unit:

Application No.: 10/616,998

Examiner:

Filing Date:

July 11, 2003

Confirmation No.:

Title: NANOCOMPOSITE ELECTROLYTE MEMBRANE AND FUEL CELL EMPOYING THE SAME

## **FOURTH** INFORMATION DISCLOSURE STATEMENT TRANSMITTAL LETTER

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

| Sir:    |   |  |   |   |   |
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|         | nclosed is a<br>449 for the above   |  |   | sclosure Statement and  | I accompanying form   |
| 1.21 th | The fee of \$18 A statement ur \$ 1.17(p) are a Charge A check in the Charge Director is here at may be require | ander 37 C.F.R. { Inder 37 C.F | § 1.97(e) is also er<br>§ 1.97(e), and the<br>osit Account No. 02<br>is encloadit card. Form PT<br>to charge any appr | F.R. § 1.17(p) is also en<br>inclosed.<br>fee of \$180.00 (1806)<br>2-4800 for the fee due.<br>issed for the fee due.<br>iO-2038 is attached. | as set forth in 37 C.F.F.  C.F.R. §§ 1.16, 1.17 and sit Account No. 02-4800 |
| This pa | aper is submitted i   | in duplicate.  | Poo   | nootfully submitted   | ·   |
|         |   |  | Res   | pectfully submitted,  |   |
| Alexar  | ox 1404<br>ndria, Virginia 223<br>336-6620  | 13-1404  | BUF<br>By   | Charles F. Wieland III  | Atm   |
| Date:   | August 11, 2005   |  |   | Registration No. 33,  | 096   |



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re Pa | atent Application of   | )                      |
|----------|--|------------------------|
| Hae-ky   | oung Kim   | )<br>) Group Art Unit: |
| Applica  | ation No.: 10/616,998  | )<br>) Examiner:<br>)  |
| Filed:   | July 11, 2003  | )<br>Confirmation No.: |
| For:     | NANOCOMPOSITE ELECTROLYTE MEMBRANE AND FUEL CELL EMPOYING THE SAME | /<br>)<br>)            |

## FOURTH INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, the accompanying information is being submitted in accordance with 37 C.F.R. §§ 1.97 and 1.98.

Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date August 11, 2005

By: Charles F. Wieland III
Registration No. 33,096

P.O. Box 1404 Alexandria, Virginia 22313-1404 (703) 836-6620

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| Substitute for form 144 | 9A/PTO & 144 | 9B/PTC | AUG 1 1 2005   | Com                                   | plete if Known |  |
|                         | FC           | DUR    | eth 🌏  | Application Number                    | 10/616,998     |  |
| INFOF                   | RMATIC       | I NC   | DISCLOSURE   | Filing Date                           | July 11, 2003  |  |
| STAT                    | EMENT        | ГВ     | THE CONTRACT OF THE CONTRACT O | First Named Inventor                  | Hae-kyoung Kim |  |
|                         |              |        | as necessary)  | Examiner Name                         |                |  |
| Sheet                   | 1            | of     | 1  | Attorney Docket Number                | 030681-531     |  |

| U.S. PATENT DOCUMENTS |                    |                                     |  |  |  |  |
|-----------------------|--------------------|-------------------------------------|--|--|--|--|
| Examiner<br>Initials  | Document<br>Number | Issue/Publication Date (MM-DD-YYYY) |  |  |  |  |
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|                      |                    |                         | FOREIGN PATENT DO | CUMENTS                                |             |                        |                       |               |      |                 |                  |
|----------------------|--------------------|-------------------------|-------------------|--|-------------|------------------------|-----------------------|---------------|------|-----------------|------------------|
| STATUS               |                    |                         |                   |  |             |                        |                       |               |      |                 |                  |
| Examiner<br>Initials | Document<br>Number | Kind Code<br>(if known) | Country           | Date of<br>Publication<br>(MM-DD-YYYY) | Translation | Partial<br>Translation | Eng. Lang.<br>Summary | Office Action | IPER | Abstract        | Cited in<br>Spec |
|                      | *02/00773          | A2                      | wo                | 01-03-2002                             |             |                        |                       | Х             |      |                 |                  |
|                      | *2003-175340       |                         | Japan             | 06-24-2003                             |             |                        |                       | Х             | L    | X               |                  |
|                      | *2000-516014       |                         | Japan             | 11-28-2000                             |             |                        |                       | X             |      | X               |                  |
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|                      |                    |                         |                   |  |             |                        |                       |               | -    | _ <del></del> - |                  |

| NON-PATENT LITERATURE DOCUMENTS |   |  |  |  |  |  |
|---------------------------------|---|--|--|--|--|--|
| Examiner<br>Initials            | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |  |  |  |  |  |
|                                 | *Japanese Office Action dated 04-19-05.   |  |  |  |  |  |
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|                                 |   |  |  |  |  |  |

\*Copy Attached

| Examiner  | Date       |  |  |
|-----------|------------|--|--|
| Signature | Considered |  |  |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.